

Notice of Allowability

Application No.

10/021,714

Examiner

Raj K. Jain

Applicant(s)

POTTER ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/11/06.
2. ☒ The allowed claim(s) is/are 1-27, 29, 31 renumbered 1-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION
EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. James A. Blanchette on 12 February 2007.

Amend the following claims;

6. (CURRENTLY AMENDED) A computer readable medium that includes ~~computer executable instructions~~ executable on a computer for reassembling a packet, the ~~computer executable instructions~~ comprising instructions configured to:

locate a fragment packet descriptor associated with the packet, the fragment packet descriptor including a pointer to an area of memory where data of a fragment is stored; and

place the contents of the fragment packet descriptor in a packet descriptor associated with the packet, the packet descriptor descriptive of the entire packet.

11. (CURRENTLY AMENDED) A method for reassembling a packet by a network device, the method comprising the steps of:

receiving a plurality of fragments associated with the packet;

determining if all the fragments for the packet have been received; and

issuing a request to reassemble the packet to a reassembly assist function if all the fragments for the packet have been received; and

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placing, by the reassembly assist function, contents of fragment packet descriptors into a packet descriptor, the packet descriptor descriptive of the entire packet.

16. (CURRENTLY AMENDED) A computer readable medium containing ~~computer-executable~~ instructions for execution on a computer for reassembling a packet, the ~~computer-executable~~ instructions comprising instructions configured to:

receive a plurality of fragments associated with the packet;
determine if all the fragments for the packet have been received; ~~and~~
issue a request to reassemble the packet to a reassembly assist function if all the fragments for the packet have been received; and

place, by the reassembly assist function, contents of fragment packet descriptors into a packet descriptor, the packet descriptor descriptive of the entire packet.

17. (CURRENTLY AMENDED) An apparatus for reassembling a packet, the apparatus comprising:

means for receiving a plurality of fragments associated with the packet;
means for determining if all the fragments for the packet have been received; ~~and~~
means for issuing a request to reassemble the packet ~~to a reassembly assist function~~ if all the fragments for the packet have been received; and

means for placing contents of fragment packet descriptors into a packet descriptor, the packet descriptor descriptive of the entire packet.

21. (CURRENTLY AMENDED) A system for reassembling a packet, the system comprising:

a processor; and
a reassembly assist function configured to communicate with the processor;
~~whereby wherein~~ the processor receives a plurality of fragments associated with the packet, determines if all the fragments for the packet have been received and issues a request to reassemble the packet to the reassembly assist function to reassemble the packet, and the

reassemble assist function places contents of fragment packet descriptors into a packet descriptor associated with the packet, the packet descriptor descriptive of the entire packet.

22. (CURRENTLY AMENDED) A method for reassembling a packet, the method comprising the steps of:

receiving a fragment packet having a fragment packet descriptor associated therewith;
placing the contents of the fragment packet descriptor in a reassembly table associated with the packet; and
in response to receiving all the fragments for the packet, issuing a request to a reassembly assist function; and
placing, by the reassembly assist function, the contents of the fragment packet descriptor into a packet descriptor, the packet descriptor descriptive of the entire packet.

24. (CURRENTLY AMENDED) A network device for reassembling a packet, comprising:

means for receiving a fragment packet having a fragment packet descriptor associated therewith;
means for placing the contents of the fragment packet descriptor in a reassembly table associated with the packet; and
means for issuing a request to reassemble the packet ~~a reassembly assist function~~, in response to receiving all the fragments for the packet; and
means for placing the contents of the fragment packet descriptor into a packet descriptor, the packet descriptor descriptive of the entire packet.

26. (CURRENTLY AMENDED) A system for reassembling a packet, comprising:

a processor configured to receive ~~receives~~ a fragment packet having a fragment packet descriptor associated therewith;

a reassembly assist function configured to communicate with the processor, the reassembly assist function adapted to locate the fragment packet descriptor associated with the packet;

the processor configured to store a reassembly table, the reassembly table storing the contents of the fragment packet descriptor in a packet descriptor wherein the packet descriptor is descriptive of the entire packet; and

the processor configured to, in response to receiving all the fragments for the packet, issue the processor issues a request to a the reassembly assist function.

27. (CURRENTLY AMENDED) The ~~method-system~~ of claim 26, ~~further comprising the step of:~~ wherein the reassembly assist function is further configured to determine ~~determines~~ if all fragments have been received.

29. (CURRENTLY AMENDED) A computer readable media, ~~comprising: said computer-readable media~~ having instructions written thereon for execution on a computer processor for ~~the practice of reassembling a packet, the instructions comprising instructions for:~~ receiving a fragment packet having a fragment packet descriptor associated therewith; placing the contents of the fragment packet descriptor in a reassembly table associated with the packet; and

in response to receiving all the fragments for the packet, issuing a request to a reassembly assist function; and placing, by the reassembly assist function, the contents of the fragment packet descriptor into a packet descriptor, the packet descriptor descriptive of the entire packet.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 1, 6, 7, 11, 16, 17, 21, 22, 24, 26 and 29 are allowed.

The prior art discloses a method and apparatus for reassembling a packet by a network device, the method comprising the steps of: receiving a plurality of fragments associated with the packet and determining if all the fragments for the packet have been received and issuing a request to reassemble the packet to a reassembly assist function if all the fragments for the packet have been received.

The prior art however fails to disclose or suggest placing the contents of a fragment packet descriptor in a packet descriptor associated with the packet, the packet descriptor descriptive of the entire packet.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj K. Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Raj K. Jain 
Primary Examiner
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February 12, 2007